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EXAMINER

PATEL, CHIRAG R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/648,004	Applicant(s) LUND, MARTIN	
	Examiner CHIRAG PATEL	Art Unit 2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☒ Claim(s) 31-33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments filed October 6, 2010 have been fully considered but they are not persuasive.

Applicants argue that Abjanic's received content based message received by the switch 145 (the alleged "common Switch") cannot be equated to Applicant's "received at least one packet".

Examiner argues that examiner has relied upon Figure 7: item 710 as cited in the rejection as the common switch which receives the messages from a source destination addressed as shown per [0073]. It routes the message from source to destination.

Applicants argue that Abjanic does not disclose or suggest "determining at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet,"

Examiner points to Abjanic which discloses per [0073], " Because content based message director 145 may be optional in some instances, switch 165 may switch the transformed message using address-based routing or switching techniques, such as switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message." The port number is equated as the initial destination address

which is specified in the header of the packet as it serves as an identifier of the switch through which the message is routed through. Examiner argues that the port number is an identifier of a switch. The port numbers, which refer to the physical ports of the switch, is equated as one of the multitude of identifiers of the switch. With respect to claim limitations that the first, second and third identifier are located in a header of a message, the above passage clearly states it per [0073], " such as switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message" Therefore, the source, port number, and the destination address is equated as the first, second and third identifiers, and all three identifiers are provided in the headers of the message as shown above.

Applicants further argue that Examiner seems to have misconstrued Applicant's "first identifier" (which identifies the common switch which receives the packet), as if any "identifier" within a packet header , such as Hendel's VLAN ID (VID) (which only identifies an external network) to be modified. Applicants further argues that Henel's received packet does not disclose the alleged "first , second and third identifiers".

Examiner notes that the VLAN operates with a layer "2" as described per Hendel per Col 11 lines 57-67, "whether a new VLAN tag is required for the received packet, based on the NEW VID tag field 351 in the associated memory. If so, then the VID in the Layer 2 header of the packet is replaced with the destination VID of the next hop, as found in the associated memory, as in block 713" The VLAN identifiers relate to the

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identifier of a ports of a switch as Hendel discloses Col 12 lines 1-15, "in block 715 the inbound subsystem 410 prepares to notify the external ports that will forward the packets outside the MLDNE of a need to route the packet by setting the first control signal (sa.sub.-- replace bit) to indicate to the forwarding external ports that the Layer 2 source address of the packet to be forwarded must be replaced with the source address of the external port."

Applicants argues that the combination of Kennedy, Abjanic and Hendel does not establish a prima facie case of obviousness to reject Applicant's claim 1.

The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The teachings of Hendel, directed to forwarding packets between VLAN using the internal and external ports of the switch is combinable with switching to a particular output port of switch based on source and/or destination address and port numbers as taught by Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al. – hereinafter Kennedy (US 7,225,247) in view of Abjanic et al. – hereinafter Abjanic (US 2003/0069975) / Hendel (US 5,920,566)

As per claim 1, Kennedy discloses a method for communicating information, the method comprising:

in a server comprising a common switch a plurality of blade servers, (said server performing functions comprising: (Col 5 line 49-Col 6 line 11; blade servers 500 through 500G; Figure 5: Items 500A-500G)

receiving at said common switch, at least one packet (Col 5 line 49-Col 6 line 11; Management controller 120 packetizes the information) from a first blade server of said plurality of blade servers, wherein said at least one packet is designated for at least a second blade server of said plurality of blade servers, and wherein said first blade server and said at least a second blade server are coupled to common switch via a common bus (Col 5 line 49- Col 6 line 11; Chassis management module 580 orchestrates the exchange of management information between blade servers 500 through 500G; Figure 5: Items 500A-500G)

Kennedy fails to disclose determining by said common switch at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and

modifying by said common switch said at least one packet from said first blade server by changing said first identifier within said header portion; and routing via said common switch, at least a portion of said modified at least one received packet from said first blade server to at least said second blade server, based on said header portion of said modified at least one received packet.

Hendel discloses modifying by said common switch said at least one packet from said first blade server by changing said first identifier within said header portion; and (abstract; modify the packets in hardware, including replace VLAN information, and forward the packets to the next hop, Col 8 lines 15-26; NEW VID address field 353 allows the MLDNE to be configured to support virtual LANs (VLANs). The associated data also includes a NEW VLAN identification (VID) TAG field, used to notify the subsystem of a need to change the packet's VID, particularly when forwarding the packet across subnetworks)

Abjanic disclose determining by said common switch at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first,

second and third identifiers are located within a header portion of said received at least one packet; and ([0073]); switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carryin the message , [0083]; a computer chassis where cards or blades can be plugged in)

routing via said common switch, (Figure 7: item 710)at least a portion of said modified at least one received packet to at least said second blade server, based on said determined first, second and third identifiers from said header portion of said at least one received packet. ([0073])

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose determining by said common switch at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and routing via said common switch, at least a portion of said at least one received packet to at least said second blade server, based on said determined first, second and third identifiers from said header portion of said at least one received packet.

The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable

with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

The teachings of Hendel, directed to forwarding packets between VLAN using the internal and external ports of the switch is combinable with switching to a particular output port of switch based on source and/or destination address and port numbers as taught by Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation would have been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50)

As per claim 2, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose transferring said header portion of said at least one received packet to said routing of said modified at least said second blade server via said common switch. Abjanic discloses comprising transferring said header portion of said at least one received packet to said routing of said modified at least said second blade server via said common switch. ([0073]) The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the

forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjic, abstract)

As per claim 3, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose wherein said common switch comprises a switch blade coupled to said common bus, and wherein said switch bade controls said routing of said header portion of said modified at least one received packet. Abjanic discloses wherein said common switch comprises a switch blade coupled to said common bus, [0083]; a computer chassis where cards or blades can be plugged in; Figure 7: item 710) and wherein said switch bade controls said routing of said header portion of said modified at least one received packet. ([0073]; switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message)

The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjic, abstract)

As per claim 4, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose wherein said common bus comprises a common backplane. Abjanic discloses wherein said common bus comprises a common backplane ([0083]; Several of the functional elements of transforming switch 710A can be combined into one or more computer systems or boxes, for example, sharing one or more processors, memory, bus, etc.) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose wherein said common bus comprises a common backplane. The common backplane of Abjanic is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing so would have been to switch the message to a selected server or processing node. (Abenjcic, abstract)

As per claim 5, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose wherein said common switch comprises a bus transceiver and a bus controller. Abjanic discloses wherein said common switch comprises a bus transceiver ([0073]; ports) and a bus controller. ([0083]; processor) At the time the invention was made, it would have been obvious to combine the transceiver of Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding

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packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing so would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

As per claim 6, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose wherein each of said first, second, and third identifiers comprises one or both of a MAC address and / or an IP address. Abjanic discloses wherein each of said first, second, and third identifiers comprises one or both of a MAC address and / or an IP address. ([0028])

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose wherein each of said first, second, and third identifiers comprises one or both of a MAC address and / or an IP address. The teachings of Abjanic, directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing so would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

As per claim 7, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose acquiring said second identifier of said first blade server; and transferring via said common switch, said second identifier of said first blade server to at least said second blade server. Abjanic discloses comprising: acquiring said second identifier of said first blade server; and transferring via said common switch, said second identifier of said first blade server to at least said second blade server.

([0073])

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose acquiring said second identifier of said first blade server; and transferring via said common switch, said second identifier of said first blade server to at least said second blade server. The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

As per claim 8, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose comprising broadcasting said header portion of said modified at least one received packet on said common switch. Hendel discloses

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comprising broadcasting said header portion of said modified at least one received packet on said common switch. (Col 11 lines 43-56; A packet's VLAN, in general, defines the Layer 2 topology used for flooding, in other words the broadcast domain) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the broadcasting of the header portion as taught by Hendel with the teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation for doing do would have been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50)

As per claim 9, Kennedy / Abjanic / Hendel disclose the method according to claim 1. Kennedy fails to disclose receiving a broadcast containing said modified at least one received packet. Hendel discloses receiving a broadcast containing said at least one received packet. (Col 11 lines 43-56; If the packet's TTL was exceeded, then in block 707 the packet may be flooded, not routed, to its VLAN) At the time the invention was made, it would have been obvious to combine the broadcasting of a packet in Hendel with the with the teachings of of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port

numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation for doing do would have been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50).

As per claim 10, Kennedy / Abjanic / Hendel disclose the method according to claim 1 and Kennedy discloses comprising receiving at least one packet from said second blade server and transferring via said common switch, said header portion of said at least one packet received from said second blade server to at least one of said first blade server and a third blade server. (Col 5 line 49 – Col 6 line 11; an application running on blade server 500 sends information to serial controller 130 using standard serial controller drivers. Serial controller 130 redirects the information to management controller 120. Management controller 120 packetizes the information (e.g., using packetizer 440) and delivers the packets to management bus 570. The packets may be sent to blade server 500B)

As per claim 11, Kennedy discloses a non-transitory machine-readable storage having stored thereon, a computer program having at least one code section for communicating information, the at least one code section being executable by a

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machine for causing the machine to perform steps comprising: (Col 2 line 65-Col 3 line 11; some aspects of the method and apparatus are implemented as software routines)

in a server comprising a common switch and a plurality of blade servers, said server performing functions comprising: (Col 5 line 49-Col 6 line 11; blade servers 500 through 500G; Figure 5: Items 500A-500G)

receiving at said common switch, at least one packet (Col 5 line 49-Col 6 line 11; Management controller 120 packetizes the information) from a first blade server of said plurality of blade servers, wherein said at least one packet is designated for at least a second blade server of said plurality of blade servers, and wherein said first blade server and said at least a second blade server are coupled to common switch via a common bus (Col 5 line 49- Col 6 line 11; Chassis management module 580 orchestrates the exchange of management information between blade servers 500 through 500G; Figure 5: Items 500A-500G)

Kennedy fails to disclose determining by said common switch at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and

modifying by said common switch said at least one packet from said first blade server by changing said first identifier within said header portion; and routing via said common switch, at least a portion of said modified at least one received packet from

said first blade server to at least said second blade server, based on said header portion of said modified at least one received packet.

Hendel discloses modifying by said common switch said at least one packet from said first blade server by changing said first identifier within said header portion; and (abstract; modify the packets in hardware, including replace VLAN information, and forward the packets to the next hop, Col 8 lines 15-26; NEW VID address field 353 allows the MLDNE to be configured to support virtual LANs (VLANs). The associated data also includes a NEW VLAN identification (VID) TAG field, used to notify the subsystem of a need to change the packet's VID, particularly when forwarding the packet across subnetworks)

Abjanic disclose determining by said common switch at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and ([0073]; switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message, [0083]; a computer chassis where cards or blades can be plugged in)

routing via said common switch, (Figure 7: item 710)at least a portion of said modified at least one received packet to at least said second blade server, based on

said determined first, second and third identifiers from said header portion of said at least one received packet. ([0073])

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose determining by said common switch at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and

routing via said common switch, at least a portion of said at least one received packet to at least said second blade server, based on said determined first, second and third identifiers from said header portion of said at least one received packet.

The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

The teachings of Hendel, directed to forwarding packets between VLAN using the internal and external ports of the switch is combinable with switching to a particular output port of switch based on source and/or destination address and port numbers as taught by Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation would have

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been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50)

As per claim 12, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11. Kennedy fails to disclose transferring said header portion of said at least one received packet to said routing of said modified at least said second blade server via said common switch. Abjanic discloses comprising transferring said header portion of said at least one received packet to said routing of said modified at least said second blade server via said common switch. ([0073]) The teachings of Abjanic, directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing so would have been to switch the message to a selected server or processing node. (Abenijic, abstract)

As per claim 13, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11. Kennedy fails to disclose wherein said common switch comprises a switch blade coupled to said common bus, and wherein

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said switch blade controls said routing of said header portion of said modified at least one received packet. Abjanic discloses wherein said common switch comprises a switch blade coupled to said common bus, ([0083]; a computer chassis where cards or blades can be plugged in; Figure 7: item 710) and wherein said switch blade controls said routing of said header portion of said modified at least one received packet.

([0073]; switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message) At the time the invention was made, it would have been obvious to combine the teaching a switch blade coupled to common bus as taught by Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

As per claim 14, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11. Kennedy fails to disclose wherein said common bus comprises a common backplane. Abjanic discloses wherein said common bus comprises a common backplane ([0083]; Several of the functional elements of transforming switch 710A can be combined into one or more computer systems or boxes, for example, sharing one or more processors, memory, bus, etc.) At the time the invention was made, it would have been obvious to a person of ordinary

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skill in the art to modify Kennedy to disclose wherein said common bus comprises a common backplane. The common backplane of Abjanic is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node.

(Abenjic, abstract)

As per claim 15, Kennedy / Abjanic / Hendel disclose the machine-readable storage according to claim 11. Kennedy fails to disclose wherein said common switch comprises a bus transceiver and a bus controller. Kennedy discloses wherein said common switch comprises a bus transceiver ([0073]; ports) and a bus controller. ([0083]; processor) At the time the invention was made, it would have been obvious to combine the transceiver of Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjic, abstract)

As per claim 16, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11. Kennedy fails to disclose wherein each of said first, second, and third identifiers comprises one or both of a MAC address and / or an

IP address. Abjanic discloses wherein each of said first, second, and third identifiers comprises one or both of a MAC address and / or an IP address. ([0028]) The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenijic, abstract)

As per claim 17, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11. Kennedy fails to disclose acquiring said second identifier of said first blade server; and transferring via said common switch, said second identifier of said first blade server to at least said second blade server. Abjanic discloses comprising: acquiring said second identifier of said first blade server; and transferring via said common switch, said second identifier of said first blade server to at least said second blade server. ([0073]) The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the

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forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjc, abstract)

As per claims 18, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11. Kennedy fails to disclose comprising broadcasting said header portion of said modified at least one received packet on said common switch. Hendel discloses comprising broadcasting said header portion of said modified at least one received packet on said common switch. (Col 11 lines 43-56; A packet's VLAN, in general, defines the Layer 2 topology used for flooding, in other words the broadcast domain) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the broadcasting of the header portion as taught by Hendel with the teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation for doing do would have been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50)

As per claim 19, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11. Kennedy fails to disclose receiving a broadcast containing said modified at least one received packet. Hendel discloses receiving a broadcast containing said at least one received packet. (Col 11 lines 43-56; If the packet's TTL was exceeded, then in block 707 the packet may be flooded, not routed, to its VLAN) At the time the invention was made, it would have been obvious to combine the broadcasting of a packet in Hendel with the teachings of Abjanic, directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation for doing so would have been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50).

As per claim 20, Kennedy / Abjanic / Hendel disclose the non-transitory machine-readable storage according to claim 11, and Kennedy discloses comprising receiving at least one packet from said second blade server and transferring via said common switch, said header portion of said at least one packet received from said second blade server to at least one of said first blade server and a third blade server. (Col 5 line 49 – Col 6 line 11; an application running on blade server 500 sends information to serial controller 130 using standard serial controller drivers. Serial controller 130 redirects the

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information to management controller 120. Management controller 120 packetizes the information (e.g., using packetizer 440) and delivers the packets to management bus 570. The packets may be sent to blade server 500B)

As per claim 21, Kennedy discloses a system for communicating information, the system comprises:

at least one processor in a common switch, at least one packet that enables receiving (Col 5 line 49-Col 6 line 11; Management controller 120 packetizes the information) at least one packet from a first blade server of a plurality of blade servers, wherein said at least one packet is designated for at least a second blade server of said plurality of blade servers, and wherein said first blade server and said at least a second blade server are coupled to common switch via a common bus in a server (Col 5 line 49-Col 6 line 11; Chassis management module 580 orchestrates the exchange of management information between blade servers 500 through 500G; Figure 5: Items 500A-500G)

Kennedy fails to disclose determining at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and

modifying said at least one packet from said first blade server by changing said first identifier within said header portion; and routing via said common switch, at least a portion of said modified at least one received packet from said first blade server to at

least said second blade server, based on said header portion of said modified at least one received packet.

Hendel discloses modifying said at least one packet from said first blade server by changing said first identifier within said header portion; and (abstract; modify the packets in hardware, including replace VLAN information, and forward the packets to the next hop, Col 8 lines 15-26; NEW VID address field 353 allows the MLDNE to be configured to support virtual LANs (VLANs). The associated data also includes a NEW VLAN identification (VID) TAG field, used to notify the subsystem of a need to change the packet's VID, particularly when forwarding the packet across subnetworks)

Abjanic disclose determining at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and ([0073]; switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message , [0083]; a computer chassis where cards or blades can be plugged in)

routing via said common switch, (Figure 7: item 710)at least a portion of said modified at least one received packet to at least said second blade server, based on said determined first, second and third identifiers from said header portion of said at least one received packet. ([0073])

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose determining at least a first identifier identifying said common switch, a second identifier identifying said first blade server, and at least a third identifier identifying said second blade server, wherein said first, second and third identifiers are located within a header portion of said received at least one packet; and

routing via said common switch, at least a portion of said at least one received packet to at least said second blade server, based on said determined first, second and third identifiers from said header portion of said at least one received packet.

The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

The teachings of Hendel, directed to forwarding packets between VLAN using the internal and external ports of the switch is combinable with switching to a particular output port of switch based on source and/or destination address and port numbers as taught by Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation would have been to be able to operate at bridge-like speeds, yet be capable of routing packets

across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50)

As per claim 22, Kennedy / Abjanic / Hendel disclose the system according to claim 21. Kennedy fails to disclose transferring said header portion of said at least one received packet to said routing of said modified at least said second blade server via said common switch. Abjanic discloses comprising transferring said header portion of said at least one received packet to said routing of said modified at least said second blade server via said common switch. ([0073]) The teachings of Abjanic, directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing so would have been to switch the message to a selected server or processing node. (Abenjcic, abstract)

As per claim 23, Kennedy / Abjanic / Hendel disclose the system according to claim 21. Kennedy fails to disclose wherein said common switch comprises a switch blade coupled to said common bus, and wherein said switch blade controls said routing of said header portion of said modified at least one received packet. Abjanic discloses wherein said common switch comprises a switch blade coupled to said common bus,

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([0083]; a computer chassis where cards or blades can be plugged in; Figure 7: item 710) and wherein said switch blade controls said routing of said header portion of said modified at least one received packet. ([0073]; switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message) At the time the invention was made, it would have been obvious to combine the teaching a switch blade coupled to common bus as taught by Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

As per claim 24, Kennedy / Abjanic / Hendel disclose the system according to claim 21. Kennedy fails to disclose wherein said common bus comprises a common backplane. Abjanic discloses wherein said common bus comprises a common backplane ([0083]; Several of the functional elements of transforming switch 710A can be combined into one or more computer systems or boxes, for example, sharing one or more processors, memory, bus, etc.) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose wherein said common bus comprises a common backplane. The common backplane of Abjanic is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding

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packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjcic, abstract)

As per claim 25, Kennedy / Abjanic / Hendel disclose the system according to claim 21. Kennedy fails to disclose wherein said common switch comprises a bus transceiver and a bus controller. Kennedy discloses wherein said common switch comprises a bus transceiver ([0073]; ports) and a bus controller. ([0083]; processor) At the time the invention was made, it would have been obvious to combine the transceiver of Abjanic with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjcic, abstract)

As per claim 26, Kennedy / Abjanic / Hendel disclose the system according to claim 21. Kennedy fails to disclose wherein each of said first, second, and third identifiers comprises one or both of a MAC address and / or an IP address. Abjanic discloses wherein each of said first, second, and third identifiers comprises one or both of a MAC address and / or an IP address. ([0028]) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Kennedy to disclose wherein each of said first, second, and third identifiers comprises

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one or both of a MAC address and / or an IP address. The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjjic, abstract)

As per claim 27, Kennedy / Abjanic / Hendel disclose the system according to claim 21. Kennedy fails to disclose acquiring said second identifier of said first blade server; and transferring via said common switch, said second identifier of said first blade server to at least said second blade server. Abjanic discloses comprising: acquiring said second identifier of said first blade server; and transferring via said common switch, said second identifier of said first blade server to at least said second blade server.

([0073]) The teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch with the forwarding packets between VLAN using the internal and external ports of the switch as taught by Hendel. The

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motivation for doing do would have been to switch the message to a selected server or processing node. (Abenjjic, abstract

As per claims 28, Kennedy / Abjanic / Hendel disclose the system according to claim 1. Kennedy fails to disclose comprising broadcasting said header portion of said modified at least one received packet on said common switch. Hendel discloses comprising broadcasting said header portion of said modified at least one received packet on said common switch. (Col 11 lines 43-56; A packet's VLAN, in general, defines the Layer 2 topology used for flooding, in other words the broadcast domain) At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the broadcasting of the header portion as taught by Hendel with the teachings of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation for doing do would have been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50)

As per claim 29, Kennedy / Abjanic / Hendel disclose the the system according to claim 21. Kennedy fails to disclose receiving a broadcast containing said modified at least one received packet. Hendel discloses receiving a broadcast containing said at least one received packet. (Col 11 lines 43-56; If the packet's TTL was exceeded, then in block 707 the packet may be flooded, not routed, to its VLAN) At the time the invention was made, it would have been obvious to combine the broadcasting of a packet in Hendel with the with the teachings of of Abjanic , directed to switching to a particular output port of switch 165 based on source and/or destination address and port numbers provided in the message or provided in a header of a packet carrying the message is combinable with the teachings of Kennedy which is directed to orchestrating the transfer of messages with the blade server across a switch. The motivation for doing do would have been to be able to operate at bridge-like speeds, yet be capable of routing packets across different subnetworks and provide upper layer functionalities such as quality of service. (Hendel, Col 4 lines 43-50).

As per claim 30, Kennedy / Abjanic / Hendel disclose the system according to claim 21. Kennedy discloses comprising receiving at least one packet from said second blade server and transferring via said common switch, said header portion of said at least one packet received from said second blade server to at least one of said first blade server and a third blade server. Col 5 line 49 – Col 6 line 11; an application running on blade server 500 sends information to serial controller 130 using standard serial controller drivers. Serial controller 130 redirects the information to management

controller 120. Management controller 120 packetizes the information (e.g., using packetizer 440) and delivers the packets to management bus 570. The packets may be sent to blade server 500B)

Allowable Subject Matter

Claims 31-33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: As per claims 31-33, a thorough review of the prior art fails to disclose or render obvious "overwriting said header portion, said first identifier with said third identifier located within said modified at least one packet, by said common switch"

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag R Patel whose telephone number is (571)272-7966. The examiner can normally be reached on Monday to Friday from 8:00AM to 4:30PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph E. Avellino, can be reached on 571-272-3905.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://paired.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/C. P./
Examiner, Art Unit 2454

/Joseph E. Avellino/
Supervisory Patent Examiner, Art Unit 2454